

IFWO

RAW SEQUENCE LISTING

CA 112

DATE: 08/11/2004

PATENT APPLICATION: US/10/660,113

TIME: 11:04:46

Input Set : A:\36-001720US.ST25.txt
Output Set: N:\CRF4\08112004\J660113.raw

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3 <110> APPLICANT: IRM, LLC and Novartis Pharmaceuticals Corporation
        Shah, Kavita
        Vincent, Fabien
        Cueto, Maria A
 8 <120> TITLE OF INVENTION: HIGHLY SPECIFIC MODULATORS OF GTPASES FOR TARGET VALIDATION
10 <130> FILE REFERENCE: 36-001720US
12 <140> CURRENT APPLICATION NUMBER: US 10/660,113
13 <141> CURRENT FILING DATE: 2003-09-10
15 <160> NUMBER OF SEQ ID NOS: 52
                                                         ENTERED
17 <170> SOFTWARE: PatentIn version 3.2
19 <210> SEO ID NO: 1
20 <211> LENGTH: 189
21 <212> TYPE: PRT
22 <213> ORGANISM: Homo sapiens
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30 Ser Ala Leu Thr Ile Gln Leu Ile Gln Asn His Phe Val Asp Glu Tyr
   20
34 Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Val Ile Asp Gly
   35
                              40
38 Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr
                          55
42 Ser Ala Met Arg Asp Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Cys
                                          75
46 Val Phe Ala Ile Asn Asn Thr Lys Ser Phe Glu Asp Ile His Gln Tyr
50 Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Asp Asp Val Pro Met Val
           . 100
                                  105
54 Leu Val Gly Asn Lys Cys Asp Leu Ala Ala Arg Thr Val Glu Ser Arg
                              120
58 Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Tyr Ile Glu Thr
                         135
62 Ser Ala Lys Thr Arg Gln Gly Val Glu Asp Ala Phe Tyr Thr Leu Val
                      150
                                         155
66 Arg Glu Ile Arg Gln His Lys Leu Arg Lys Leu Asn Pro Pro Asp Glu
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70 Ser Gly Pro Gly Cys Met Ser Cys Lys Cys Val Leu Ser
74 <210> SEQ ID NO: 2
75 <211> LENGTH: 189
76 <212> TYPE: PRT
77 <213> ORGANISM: artificial
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79 <220> FEATURE:
80 <223> OTHER INFORMATION: mutant of H-Ras
82 <400> SEQUENCE: 2
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88 Ser Ala Ala Thr Ile Gln Leu Ile Gln Asn His Phe Val Asp Glu Tyr
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92 Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Val Ile Asp Gly
96 Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr
                           55
100 Ser Ala Met Arg Asp Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Cys
104 Val Phe Ala Ile Asn Asn Thr Lys Ser Phe Glu Asp Ile His Gln Tyr
                    85
                                        90
108 Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Asp Val Pro Met Val
                100
112 Leu Val Gly Asn Lys Cys Asp Leu Ala Ala Arg Thr Val Glu Ser Arg
            115
                                120
116 Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Tyr Ile Glu Thr
120 Ser Ala Lys Thr Arg Gln Gly Val Glu Asp Ala Phe Tyr Thr Leu Val
121 145
                        150
                                            155
124 Arg Glu Ile Arg Gln His Lys Leu Arg Lys Leu Asn Pro Pro Asp Glu
                    165
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128 Ser Gly Pro Gly Cys Met Ser Cys Lys Cys Val Leu Ser
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132 <210> SEQ ID NO: 3
133 <211> LENGTH: 189
134 <212> TYPE: PRT
135 <213> ORGANISM: artificial
137 <220> FEATURE:
138 <223> OTHER INFORMATION: mutant of H-Ras
140 <400> SEQUENCE: 3
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146 Ser Ala Gly Thr Ile Gln Leu Ile Gln Asn His Phe Val Asp Glu Tyr
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150 Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Val Ile Asp Gly
154 Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr
                            55
158 Ser Ala Met Arg Asp Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Cys
                        70
162 Val Phe Ala Ile Asn Asn Thr Lys Ser Phe Glu Asp Ile His Gln Tyr
166 Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Asp Asp Val Pro Met Val
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                                    105
170 Leu Val Gly Asn Lys Cys Asp Leu Ala Ala Arq Thr Val Glu Ser Arq
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171 115 120 174 Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Tyr Ile Glu Thr 135 178 Ser Ala Lys Thr Arg Gln Gly Val Glu Asp Ala Phe Tyr Thr Leu Val 150 182 Arg Glu Ile Arg Gln His Lys Leu Arg Lys Leu Asn Pro Pro Asp Glu 165 170 186 Ser Gly Pro Gly Cys Met Ser Cys Lys Cys Val Leu Ser 180 190 <210> SEQ ID NO: 4 191 <211> LENGTH: 189 192 <212> TYPE: PRT 193 <213> ORGANISM: artificial 195 <220> FEATURE: 196 <223> OTHER INFORMATION: mutant of H-Ras 198 <400> SEQUENCE: 4 200 Met Thr Glu Tyr Lys Leu Val Val Gly Ala Gly Gly Val Gly Lys 204 Ser Ala Leu Thr Ile Gln Leu Ile Gln Asn His Ala Val Asp Glu Tyr 208 Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Val Ile Asp Gly 212 Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr 213 55 216 Ser Ala Met Arg Asp Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Cys 70 220 Val Phe Ala Ile Asn Asn Thr Lys Ser Phe Glu Asp Ile His Gln Tyr 90 224 Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Asp Val Pro Met Val 225 100 . 105 228 Leu Val Gly Asn Lys Cys Asp Leu Ala Ala Arg Thr Val Glu Ser Arg 115 120 232 Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Tyr Ile Glu Thr 135 236 Ser Ala Lys Thr Arg Gln Gly Val Glu Asp Ala Phe Tyr Thr Leu Val 150 240 Arg Glu Ile Arg Gln His Lys Leu Arg Lys Leu Asn Pro Pro Asp Glu 165 170 244 Ser Gly Pro Gly Cys Met Ser Cys Lys Cys Val Leu Ser 245 180 248 <210> SEQ ID NO: 5 249 <211> LENGTH: 189 250 <212> TYPE: PRT 251 <213> ORGANISM: artificial 253 <220> FEATURE: 254 <223> OTHER INFORMATION: mutant of H-Ras 256 <400> SEQUENCE: 5 258 Met Thr Glu Tyr Lys Leu Val Val Gly Ala Gly Gly Val Gly Lys 259 1 5

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262 Ser Ala Leu Thr Ile Gln Leu Ile Gln Asn His Gly Val Asp Glu Tyr 25 266 Asp Pro Thr Ile Glu Asp Ser Tyr Arq Lys Gln Val Val Ile Asp Gly . 40 270 Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr 274 Ser Ala Met Arg Asp Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Cys 278 Val Phe Ala Ile Asn Asn Thr Lys Ser Phe Glu Asp Ile His Gln Tyr 282 Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Asp Val Pro Met Val 100 105 286 Leu Val Gly Asn Lys Cys Asp Leu Ala Ala Arg Thr Val Glu Ser Arg 120 290 Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Tyr Ile Glu Thr 135 140 294 Ser Ala Lys Thr Arg Gln Gly Val Glu Asp Ala Phe Tyr Thr Leu Val 150 298 Arg Glu Ile Arg Gln His Lys Leu Arg Lys Leu Asn Pro Pro Asp Glu 165 170 302 Ser Gly Pro Gly Cys Met Ser Cys Lys Cys Val Leu Ser 180 306 <210> SEQ ID NO: 6 307 <211> LENGTH: 189 308 <212> TYPE: PRT 309 <213> ORGANISM: artificial 311 <220> FEATURE: 312 <223> OTHER INFORMATION: mutant of H-Ras 314 <400> SEQUENCE: 6 316 Met Thr Glu Tyr Lys Leu Val Val Gly Ala Gly Gly Val Gly Lys 320 Ser Ala Leu Thr Ile Gln Leu Ile Gln Asn His Phe Val Asp Glu Tyr 20 25 324 Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Val Ile Asp Gly 328 Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr 332 Ser Ala Met Arg Asp Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Cys 336 Val Phe Ala Ile Asn Asn Thr Lys Ser Phe Glu Asp Ile His Gln Tyr 340 Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Asp Asp Val Pro Met Val 344 Leu Val Gly Ala Lys Cys Asp Leu Ala Ala Arg Thr Val Glu Ser Arg 120 348 Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Tyr Ile Glu Thr 135 140 352 Ser Ala Lys Thr Arg Gln Gly Val Glu Asp Ala Phe Tyr Thr Leu Val 353 145

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356 Arq Glu Ile Arg Gln His Lys Leu Arq Lys Leu Asn Pro Pro Asp Glu 165 170 175 360 Ser Gly Pro Gly Cys Met Ser Cys Lys Cys Val Leu Ser 180 185 364 <210> SEQ ID NO: 7 365 <211> LENGTH: 189 366 <212> TYPE: PRT 367 <213> ORGANISM: artificial 369 <220> FEATURE: 370 <223> OTHER INFORMATION: mutant of H-Ras 372 <400> SEQUENCE: 7 374 Met Thr Glu Tyr Lys Leu Val Val Gly Ala Gly Gly Val Gly Lys 378 Ser Ala Leu Thr Ile Gln Leu Ile Gln Asn His Phe Val Asp Glu Tyr 20 25 382 Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Val Ile Asp Gly 35 40 386 Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr 390 Ser Ala Met Arg Asp Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Cys 394 Val Phe Ala Ile Asn Asn Thr Lys Ser Phe Glu Asp Ile His Gln Tyr 398 Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Asp Asp Val Pro Met Val 100 105 402 Leu Val Gly Gly Lys Cys Asp Leu Ala Ala Arg Thr Val Glu Ser Arg 406 Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Tyr Ile Glu Thr 135 410 Ser Ala Lys Thr Arg Gln Gly Val Glu Asp Ala Phe Tyr Thr Leu Val 150 155 414 Arg Glu Ile Arg Gln His Lys Leu Arg Lys Leu Asn Pro Pro Asp Glu 165 170 418 Ser Gly Pro Gly Cys Met Ser Cys Lys Cys Val Leu Ser 180 422 <210> SEO ID NO: 8 423 <211> LENGTH: 189 424 <212> TYPE: PRT 425 <213> ORGANISM: artificial 427 <220> FEATURE: 428 <223> OTHER INFORMATION: mutant of H-Ras 430 <400> SEQUENCE: 8 432 Met Thr Glu Tyr Lys Leu Val Val Gly Ala Gly Gly Val Gly Lys 436 Ser Ala Leu Thr Ile Gln Leu Ile Gln Asn His Phe Val Asp Glu Tyr 20 25 440 Asp Pro Thr Ile Glu Asp Ser Tyr Arg Lys Gln Val Val Ile Asp Gly 35 40 444 Glu Thr Cys Leu Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Tyr

RAW SEQUENCE LISTING ERROR SUMMARY
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

 $\label{eq:seq:2.3,4.5,6.7,8.9,10,11,12,13,14,15,16,17,19,20,21,22,23,24,25,26,27,28,29} \\ \text{Seq$\#:30,31,32,33,34}$

VERIFICATION SUMMARY

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